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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4		PROGRAM ELEMENT NUMBER AND NAME SURFACE SHIP TORPEDO DEFENSE / 0603506N			PROJECT NUMBER AND NAME Surface Ship Torpedo Defense 0225/2854		
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	13.929	44.891	46.896	47.475	39.617	27.658	12.653
Tripwire Torpedo Defense 2854	9.710	2.521	0.000	0.000	0.000	0.000	0.000
Surface Ship Torpedo Defense 0225	4.219	42.370	46.896	47.475	39.617	27.658	12.653
Defense Emergency Response Funds (DERF) Funds: Not Applicable A. Mission Description and Budget Line Justification: Project 0225/2854 develops Tripwire AN/WSQ-11 Torpedo Defense System (TDS) which will provide the Tripwire towed sensors and processors to detect threat torpedo and provide launch orders for associated Anti-Torpedo Torpedo (ATT) All-Up-Round (AUR) countermeasure. The AN/WSQ-11 TDS will incorporate the functionality of the AN/SLQ-25A (NIXIE) Towed Torpedo Countermeasure. The AN/WSQ-11 is planned for installation on large deck ships, i.e. CVN, amphibious (LHA, LHD, LPD, LSD, AGF, LCC)/Combatant Logistic Forces (AOE), and selected DDG-51 Class ships without towed array. The AN/WSQ-11 is planned for fleet introduction in FY11 with a Block II (simple salvo) capability. A complex salvo Block III capability is planned for FY13 fleet introduction. The AN/WSQ-11 TDS is closely linked with the ONR FNC program (Platform Protection and Littoral ASW) which provides advance technology inserts at key transition points in the AN/WSQ-11 schedule							

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Budget Item Justification
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME Surface Ship Torpedo Defense, 0603506N	PROJECT NUMBER AND NAME Surface Ship Torpedo Defense 0225/2854																								
B. Accomplishments/Planned Program <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"><thead><tr><th style="width: 30%;"></th><th style="width: 20%;">FY 03 (F0225)</th><th style="width: 20%;">FY 04 (F0225)</th><th style="width: 30%;">FY 05 (F0225)</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">4.219</td><td style="text-align: center;">42.370</td><td style="text-align: center;">46.896</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"><u>AN/WSQ-11 SYSTEM</u> FY03 - Continue AN/WSQ-11 component Advanced Development, Simulation and Modeling, and prototype component in water trials. FY04 - Award two Industry contracts for conduct of Tripwire DCL DEMO; Initiate ARL PSU development of ATT ADM FY05 - Conduct DCL DEMO trials; Continue ATT ADM development and initial in water trials. FY06 - Conduct final DCL DEMO and continue ATT ADM in-water trials; Award post MS B competitive contract for AN/WSQ-11 development.</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"><u>ANTI-TORPEDO TORPEDO (ATT)</u> FY04 - Continue ATT Component Testing; Initiate fabrication of ATT ADM units. FY05 - Continue fabrication of ADM ATT AURs; Conduct first In-water testing of ADM units. (CT-1) FY06 - Continue in water testing (CT2 and CT3) ADM units and initiate post MS B EDM development.</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"><u>TRIPWIRE</u> FY04 - Initiate build of DCL DEMO prototypes by selected industry companies. FY05 - Conduct initial in water trials of competing DEMO developments (Trials 1 &2) FY06 - Conduct competitive DEMO sea trial; Initiate post MS B EDM development.</div> <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 20%;">FY 03 (F2854)</th><th style="width: 20%;">FY 04 (F2854)</th><th style="width: 30%;">FY 05 (F2854)</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">9.710</td><td style="text-align: center;">2.521</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; padding: 5px;">FY03-Continue Development of ATT components. Continue development of AN/SLQ-25A enhanced EC16 and Littoral Cables for Surface Combatants . FY04-Complete development of AN/SLQ-25A of enhanced EC16 and littoral cable.</div>				FY 03 (F0225)	FY 04 (F0225)	FY 05 (F0225)	Accomplishments/Effort/Subtotal Cost	4.219	42.370	46.896	RDT&E Articles Quantity					FY 03 (F2854)	FY 04 (F2854)	FY 05 (F2854)	Accomplishments/Effort/Subtotal Cost	9.710	2.521	0.000	RDT&E Articles Quantity			
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C. PROGRAM CHANGE SUMMARY:			
Funding:	FY 2003	FY 2004	FY 2005
FY 2004 President's Budget:	14.321	48.347	53.730
Current BES/ President's Budget: (FY05 Pres Controls)	13.929	44.891	46.896
Total Adjustments	-0.392	-3.456	-6.834
Summary of Adjustments			
Miscellaneous Adjustments	-0.392	-3.456	-0.334
Programmatic Adjustment	0.000	0.000	-6.500
Subtotal	-0.392	-3.456	-13.334
Schedule:			
See Milestone Chart			
Technical:			
Not Applicable			

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D. OTHER PROGRAM FUNDING SUMMARY:									
<u>Line Item No. & Name</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Complete</u>	<u>Total Cost</u>
OPN BLI: 221300									
Surface Ship Torpedo Defense - SSTO	0.000	13.725	22.273	28.411	8.406	0.281	4.467	CONT.	CONT.
WPN BLI: 311300									
Surface Ship Torpedo Defense - SSTO	0.000	0.000	0.000	3.970	5.811	5.928	8.297	CONT.	CONT.
E. ACQUISITION STRATEGY:									
<p>The project develops Surface Ship Torpedo Defense (SSTO) capabilities using an evolutionary acquisition incremental development approach. The existing AN/SLQ-25A NIXIE is upgraded through ECP's performed by the Original Equipment Manufacture (OEM). ATT development will be executed by ARL/PSU for preliminary design and ADM development. AN/WSQ-11 System continued development and integration of the Tripwire and ATT subsystems will be competitively awarded to a single prime contractor in FY06 following Milestone B.</p>									
F. MAJOR PERFORMERS:									
See attached R3									

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Exhibit R-3 Cost Analysis (page 1)								DATE: February 2004						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME								
RDT&E, N / BA-4			Surface Ship Torpedo Defense, 0603506N			Surface Ship Torpedo Defense 0225/2854								
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Ancillary Hardware Development	CPFF	ST Productions, Farmingdale, NJ		2.610	01/03	1.300	02/04	0.000		0.000		CONT.	0.000	
Systems Engineering	WX	NUWC, Newport, RI		0.750	12/02	2.057	12/03	0.900	12/04	1.100	12/05	CONT.	0.000	
Systems Engineering	CPFF	PSU, State College, PA		7.819	12/02	19.271	02/04	19.646	12/04	6.410	12/05	CONT.	0.000	
Systems Engineering	CPFF	JHU, Baltimore , MD		0.081	12/02	0.440	12/03	0.200	12/04	0.300	12/05	CONT.	0.000	
Systems Engineering	WX	NSWC, Indian Head, MD		1.261	12/02	1.275	12/03	4.250	12/04	4.300	12/05	CONT.	0.000	
Systems Engineering	WX	NUWC/Keyport,WA		0.600	12/02	0.825	12/03	0.800	12/04	0.500	12/05	CONT.	0.000	
Systems Engineering	WX	FTSCLANT/Norfolk, VA		0.108	12/02	0.000	12/03	0.100	12/04	0.100	12/05	CONT.	0.000	
Systems Engineering	DCL Demo	SBIR	AAC			7.500	02/04	9.900	12/04	2.600	12/05	0.000	20.000	40.000
Systems Engineering	DCL Demo	BAA	Contractor TBD			7.500	04/04	9.900	12/04	2.600	12/05	0.000	20.000	
Systems Engineering	WSQ-11	CPFF	Competitive Award Prime Contractor FY06	0.000		0.000		0.000		28.365	04/05	CONT.	0.000	

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Exhibit R-3, Project Cost Analysis
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Exhibit R-3, Project Cost Analysis
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Exhibit R-3 Cost Analysis (page 3)										DATE: February 2004				
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RDT&E, N / BA-4			Surface Ship Torpedo Defense, 0603506N			Surface Ship Torpedo Defense 0225/2854								
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation													0.000	
Operational Test & Evaluation													0.000	
Live Fire Test & Evaluation													0.000	
Test Assets													0.000	
Tooling													0.000	
GFE													0.000	
Award Fees													0.000	
Subtotal T&E			0.000	0.000		0.000		0.000		0.000		0.000	0.000	
Remarks:														
Contractor Engineering Support													0.000	
Government Engineering Support													0.000	
Program Management Support	C/CPFF	EG&G Gaithersburg, Md		0.600	01/03	0.650	01/04	0.650	01/05	0.650	01/06	CONT.	0.000	
Travel		PMS 415		0.100	11/02	0.100	11/03	0.150	11/04	0.150	11/05	CONT.	0.000	
Transportation													0.000	
SBIR Assessment													0.000	
Subtotal Management			0.000	0.700		0.750		0.800		0.800		0.000	0.000	
Remarks:														
Total Cost			0.000	13.929		44.891		46.896		47.475		0.000	0.000	
Remarks:														







































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Exhibit R-3, Project Cost Analysis
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EXHIBIT R-4, SCHEDULE PROFILE (page 1)					DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE			
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-4				Surface Ship Torpedo Defense 0225/2854			
	FY03	FY04	FY05	FY06	FY07	FY08	FY09
AN/WSQ-11 System		Draft ORD   WSQ-11 Spec	 CDD	MS B   WSQ-11 Prime Contract Award	SD&D Phase		LRIP
					 PDR  DRR  ST-1	CDR   MS C  ST-2  ST-3	 ST-4  ST-5
Tripwire	 Spec Development	 Demo Contract Award	DCL Demo Phase			EDM Build and Testing (2)	
			 DD-1  DD-2	 Demo Trial	 TT-1  Software V 1.0 Complete	 TT-2  TT-3  Software V 2.0 Complete	 TT-4  Software V 3.0 Complete
Anti-Torpedo Torpedo	 Spec 			 	EDM Build and Testing (17)		LRIP
		ADM Component	Build and Testing (8)		 CT-4  CT-5  CT-6	 CT-7	
			 CT-1	 CT-2  CT-3			

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Exhibit R-2, RD TEN Budget Item Justification
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